The Science of Seasons Learn-and-Play Activities Book

Topics, Activities, & Learning Points:

• Make Your Own Comics
  o Quotation marks and punctuation marks
  o Dialogue
  o Writing
  o Art
• Cootie Catcher
  o Science facts
  o Vocabulary
  o Following instructions
• Playsets, playset figures, and cutouts
  o Use to act out scenes from The Science of Seasons storybook
  o Cutting & construction
  o Imaginative play
• Copywork
  o Handwriting
  o Writing conventions
  o Reinforcing material presented in the The Science of Seasons storybook
  o Bible verse
• Greek and Latin Root Cards & Game
  Greek and Latin roots from words in the book
  o Vocabulary
  o Memory skills
• Abigail’s Spelling Lesson
  o Spelling “ph” words
  o Spelling strategies
  o The history behind why we use “ph” to spell words with the “f” sound
  o Bible words
  o Word find
• My Report on the Sun
  o Using the storybook to get information
  o Science facts
  o Illustration
• The Science of the Seasons
  o Reinforces and expands on science concepts in the book:
    ◆ Modeling the tilt and spin of the earth using your hand
  o Learning the tilt of the earth
  o Earth’s axis
  o Solstices and equinoxes
  o Earth’s orbit
  o Perihelion
  o Aphelion
  o Distance of the earth from the sun during different times of the year
    o Math: angles
    ◆ Vocabulary: tri means three, vertex, angle, degrees
    o Math: using a protractor
    o Following instructions
    o Papier-mâché globe with cut out continents
    ◆ Geography: reinforce the 7 continents
    ◆ Science: using the globe with activity pages
    o Flashlight activity
    ◆ Tracing direct and indirect light
• Make an Interactive Thermometer
  o Counting by 10’s
  o Negative and positive numbers
  o Measuring temperature in degrees
  o Freezing’s temperature in Fahrenheit
  o Math: Henry’s riddles
• Time and Temperature
  o Record temperatures
  o Math: finding an average
  o Record and write time
• Graphing Temperatures
  o Recording daily temperatures
  o Learning how to make and read a bar graph
  o Comparing temperatures across different seasons
• Seasonal Temperatures
  o Reading lines graphs
  o Comparing seasonal city temperatures in different hemispheres
- Recording and graphing average temperatures in your area
  - Vocabulary: Aborigines
  - Geography, Maps & Globes
    - Fill out the map of Australia
    - When is it summer in Australia?
    - Using a map or globe to find information
    - Equinoxes have an equal amount of day and night
    - Latitude and longitude
    - North, south, east, west
    - Important lines of latitude:
      - Arctic Circle
      - Tropic of Cancer
      - Equator
      - Tropic of Capricorn
      - Antarctic Circle
  - The tropics
  - International Dateline
  - G.P.S. (global positioning system)
  - Prime Meridian
  - Using coordinates to locate a place
  - Copywork (a rhyme to memorize what latitude and longitude are)
  - Math: parallel lines
  - Northern Lights Art Project
    - Science concepts:
      - Geographic poles vs. magnetic poles
      - What causes northern lights
      - What makes the colors of the northern lights
      - Earth spins on its axis once every 24 hours
    - Art project
  - Coloring pages
    - Art and fine motor control
  - Dot-to-Dots
    - Art
    - Counting
  - Critical thinking skills (figuring out the pictures)
    - Mazes
    - Critical thinking skills
    - Rain in a Jar
      - Science: condensation
    - Vivid Verbs and Adjectives
      - Bible referenced (character)
      - Learn about adjectives and verbs
      - Using a thesaurus
      - Making writing more interesting
      - Practice exercises
    - Learning About Other Cultures
      - Japanese
        - Japanese writing system
          - Romaji
          - Hiragana
          - Katakana
          - Kanji
        - Vocabulary: Kimono
        - Make a pop-up card
          - Art
          - Writing
        - Color the Japanese flag
        - Geography:
          - The island of Japan
          - Tokyo
    - Vocabulary Crossword Puzzles
      - Vocabulary
      - Critical Thinking
      - Spelling
    - Fall Leaf Adjectives
      - Reinforce what was learned about adjectives
      - Synonyms
      - Writing
      - Art
    - Write Your Own Recipe
    - Recipe Cards
      - Cooking skills
      - Following instructions
- Math: measurement
- How I Create Illustrations Interview and Art Lesson
  - Reading nonfiction
  - Creating a drawing using a grid
  - Seeing negative space to draw better
- Make a Paper Snowflake
  - Art and cutting skills
- 4 Seasons Tree Art Activity
  - Art
  - Science observations (how a tree looks in different seasons)
- My Favorite Holiday Memories
  - Writing
- 1816 - The Year Without a Summer
  - History
  - Volcano eruption
  - Geography:
    - Indonesia
  - Poetry
    - Excerpt from Lord Byron's poem "Darkness"
    - Write a poem
  - Classic literature titles and authors introduced
  - Drawing
- Vocabulary cards
  - Learn and practice vocabulary from the storybook (with pronunciation helps)